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SS/WP4 Actions Prior to the Meeting of the Special PanelFederal Communications Commission
Office of the Secretary

- SS/WP4 has developed a process for recommending an ATV system to the Advisory Committee (see Appendix I).
- SS/WP4 has developed a list of ten Selection Criteria (the first step in the Recommendation Process) and their associated target values (see Appendix II and Appendix III). The Selection Criteria fall into three categories:
 - Spectrum Utilization
 - Technology
 - Economics
- SS/WP4 has developed an outline for its final report (see Appendix IV). The first six chapters will include background information and contributions from other working parties. Chapters seven through nine will be the substantive contributions of SS/WP4. (Chapter seven will explain the Selection Criteria and their importance in the selection of an ATV system. Chapter eight will contain the analysis of each proposed system. Chapter nine will contain a comparison of proposed systems and recommendations.) The remainder of the final report will contain conclusions and other information regarding work which must be done in the future.
- SS/WP4 will write a report on each proposed system based on test data and economic analysis for inclusion in chapter eight of the SS/WP4 final report. The Selection Criteria will be the basis upon which each system is analyzed. (PS/WP3 will provide test analysis on Selection Criteria related to Spectrum Utilization. SS/WP4 task force will provide test analysis on Selection Criteria related to Technology. SS/WP3 will provide analysis on Economics related Selection Criteria.) These reports will be written, system by system, as test data becomes available. SS/WP4 will not attempt to reach conclusions in the individual system reports but will assure that a fair and balanced report is written on each system.
- After all system reports are completed and adopted by SS/WP4, one last meeting of SS/WP4 may be required to adopt a summary report. SS/WP4 would leave part, or all, of chapter nine (Comparisons and Recommendations) of the SS/WP4 final report to be completed by a Special Panel (or Recommendation Task Force) to be appointed by the Advisory Committee Chairman.

The Special Panel Meeting

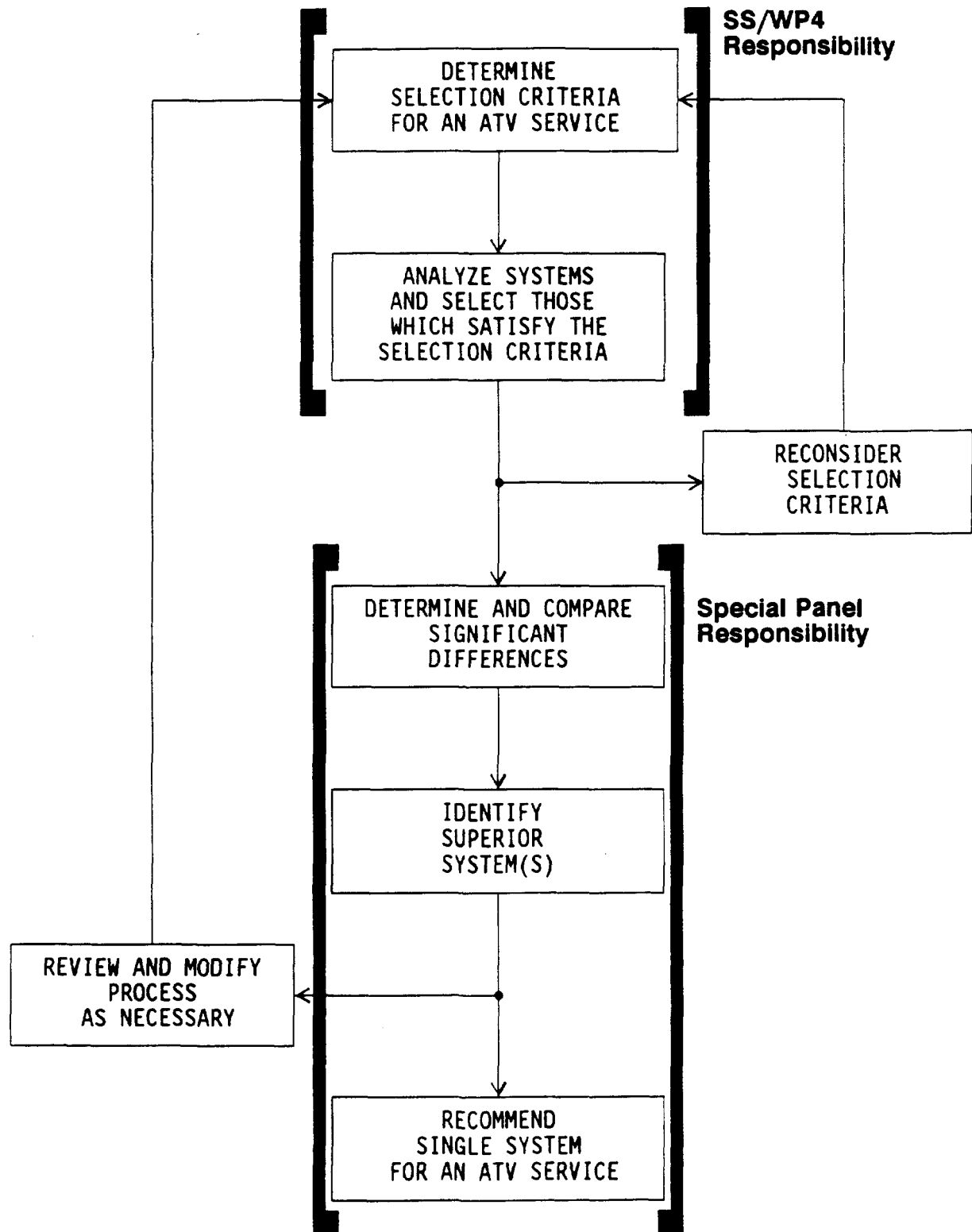
- The Special Panel (or Recommendation Task Force) would meet shortly after the last SS/WP4 meeting. Its assigned objective would be to recommend an ATV system to the Advisory Committee.

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- The meeting would begin on a Monday morning in a hotel in the Washington, D.C. area, but not downtown. The meeting would be conducted in a formal manner, similar to ITU meetings (CCIR and CCITT), with controlled interventions. The meeting would be open to the public, as are all Advisory Committee meetings, but for observation only.
 - Large table with assigned seating for the panelists
 - Chairs provided at the periphery of the room for observers
 - Strict, formal control of the meeting by the chairman
 - "Flags" for panelists to use to request the floor
 - Controlled interventions with the use of microphones for panelists
 - If desired, taping of the proceedings could be arranged
- Several presentations would be given on the opening day:
 - Statement of the objectives of the Special Panel
 - Final report of SS/WP4
 - Explanation of the Selection Criteria
 - Reports on each proposed system
 - Statements by each proponent
- Discussions and recommendations would be centered on identifying the system which best satisfies the Selection Criteria. The procedures shown in the Recommendation Process would be used.
 - Systems would be ranked on each Selection Criteria.
 - Inferior systems would be eliminated.
 - An overall best choice may become obvious when all systems have been ranked according to each Selection Criteria.
 - If no single winner becomes apparent, the relative importance of the Selection Criteria would be determined by the Panel.
 - If more than one choice continues to exist, the Panel would develop rationale for why each choice might be adopted by the FCC. The Panel would also list the disadvantages of each choice.
 - The goal of the meeting would be to reach consensus on an ATV system to be recommended to the Advisory Committee.
- Drafting groups would be assigned tasks as the meeting progresses. All text, including recommendations, would be approved by the full Panel.
- The meeting would not conclude until the work is complete (including the weekend if the work is not complete Friday afternoon). All text prepared during the meeting would be adopted during the meeting. No "after-the-fact" approvals would be required.

RECOMMENDATION PROCESS



SELECTION CRITERIA

Spectrum Utilization

Coverage Area

Accommodation Percentage

Economics

Cost to Broadcasters

Cost to Alternative Media

Cost to Consumers

Technology

Audio/Video Quality

Transmission Robustness

Scope of Services and Features

Extensibility

Interoperability considerations

Target Values for the Selection Criteria

SS/WP4 has identified ten criteria to be used in recommending an advanced television system. Target values are being developed to represent the target level of performance aspired to in an advanced television system. These target values do not represent minimum criteria that tested systems are expected to exceed. The ten selection criteria and associated target values are:

Coverage area — Comparable to NTSC.

Accommodation percentage — 100% of currently authorized full service stations and pending applications for full service stations. It is desirable to accommodate all noncommercial vacant allotments.

Audio/video quality — The CCIR has defined HDTV in terms of current television systems. That definition, applied to NTSC, leads to the following target value. The resolution should be about twice that of NTSC in both the vertical and horizontal directions, the temporal resolution should not be less than NTSC, the color rendition should be superior to NTSC, any artifacts should be less objectionable than are NTSC artifacts, the aspect ratio should be 16:9, and the subjective sound quality should be comparable to compact disc.

Transmission robustness — Better than NTSC within the defined coverage area.

Scope of services and features — When compared with NTSC, increased capability and flexibility in the ability to provide audio, captioning, data services, etc.

Extensibility — A new service must provide long life, just as NTSC has provided a long life, by supporting future enhancements and future technology advances.

Interoperability — A new service should be "friendly" to alternate delivery media. Interoperability with Cable TV is mandatory. Interoperability with VCRs, satellite, computer, data communications, and telecommunications applications with simple interfacing hardware is also an objective.

Cost to broadcasters

Cost to alternative media

Cost to consumers

It is difficult to establish target values for cost issues. Furthermore, cost is a function of market conditions and production volume. Key issues for broadcasters and cable operators would be the cost to "pass" programming. Key issues for consumers would be the cost of a receiver and a VCR after five years of production. In the SS/WP4 final report, it may be reasonable to point out the cost of current top-of-the-line NTSC projection receivers and top-of-the-line VCRs for reference as base-line costs, but not as target values.

**FCC ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE
SYSTEMS SUBCOMMITTEE
WORKING PARTY ON SYSTEM STANDARDS (SS/WP4)**

OUTLINE FOR SS/WP4 FINAL REPORT

- 1. Executive Summary**
- 2. Introduction**
- 3. Background and History**
- 4. Contributions from the Planning Subcommittee**
 - 4.1. WP1 — Working Party on Technology Attributes and Assessment
 - 4.2. WP2 — Working Party on Testing and Evaluation Specifications
 - 4.3. WP3 — Working Party on Spectrum Utilization and Alternatives
 - 4.4. WP4 — Working Party on Alternative Media Technology and BC Interface
 - 4.5. WP5 — Working Party on Economic Factors and Market Penetration
 - 4.6. WP6 — Working Party on Systems Subjective Assessment
 - 4.7. WP7 — Working Party on Audience Research
 - 4.8. AG1 — Advisory Group on Creative Issues
 - 4.9. AG2 — Advisory Group on Consumer/Trade Issues
- 5. Contributions from the Systems Subcommittee**
 - 5.1. WP1 — Working Party on Systems Analysis
 - 5.2. WP2 — Working Party on Testing and Evaluation
 - 5.2.1. ATTC Report
 - 5.2.2. CableLabs Report
 - 5.2.3. ATEL Report
 - 5.2.4. Field Test Report
 - 5.3. WP3 — Working Party on Economic Assessment
 - 5.4. WP4 — Working Party on System Standards
- 6. Contributions from the Implementation Subcommittee**
 - 6.1. WP1 — Working Party on Policy and Regulation
 - 6.2. WP2 — Working Party on Transition Scenarios

7. Selection Criteria

7.1. Introduction

7.2. Spectrum Utilization Criteria

- 7.2.1. Background**
- 7.2.2. Coverage Area**
- 7.2.3. Accommodation Percentage**

7.3. Economics Criteria

- 7.3.1. Background**
- 7.3.2. Cost to Broadcasters**
- 7.3.3. Cost to Alternative Media**
- 7.3.4. Cost to Consumers**

7.4. Technology Criteria

- 7.4.1. Background**
- 7.4.2. Audio/Video Quality**
- 7.4.3. Transmission Robustness**
- 7.4.4. Scope of Services and Features**
- 7.4.5. Extensibility**
- 7.4.6. Interoperability Considerations**

8. Analysis of System Data

8.1. System A

- 8.1.1. Policy and Regulatory Issues**
- 8.1.2. Spectrum Utilization**
- 8.1.3. Economics**
- 8.1.4. Technology**

8.2. System B

- 8.2.1. Policy and Regulatory Issues**
- 8.2.2. Spectrum Utilization**
- 8.2.3. Economics**
- 8.2.4. Technology**

8.3. System C

- 8.3.1. Policy and Regulatory Issues**
- 8.3.2. Spectrum Utilization**
- 8.3.3. Economics**
- 8.3.4. Technology**

8.4. Other Sections as necessary (one per system)

9. Comparisons and Recommendations

**Special Panel
Responsibility**

- 9.1. System Comparison
 - 9.1.1. Policy and Regulatory Issues
 - 9.1.2. Spectrum Utilization
 - 9.1.3. Economics
 - 9.1.4. Technology
- 9.2. Recommendations
 - 9.2.1. Policy and Regulatory Issues
 - 9.2.2. Spectrum Utilization
 - 9.2.3. Economics
 - 9.2.4. Technology

10. Implementation Plan

11. Future Work

- 11.1. Development of Standards

12. Conclusions

13. Notes and Comment

14. Bibliography

15. Acknowledgements

Appendices

- A1. Raw Data
- A2. Methods of Data Reduction
- A3. Glossary